1. Method for producing ceramic articles, comprising the steps of:
   a. using a rapid prototyping process to produce a disposable mold having a cavity which has the shape of the desired ceramic article;
   b. filling said cavity with a ceramic slurry which includes a liquid carrier;
   c. cooling the slurry filled mold cavity to solidify said slurry;
   d. removing said disposable mold; and
   e. removing substantially all of the original liquid carrier from said solidified slurry to produce a ceramic article.

2. Method as in Claim 1 wherein said slurry is aqueous based.

3. Method as in Claim 1 wherein said slurry consists essentially of (by wt.):
   a. from about 70% to about 90% ceramic particles
   b. an amount of at least one cryoprotectant material sufficient to suppress the formation of large crystals during solidification
   c. from about 10% to about 30% of a liquid suspension of at least one colloidal ceramic material,
   d. up to about 5% of other additives
   e. balance essentially water.

4. Method as in Claim 1 wherein the disposable mold is made of a material selected from the group consisting of polymers, waxes, plastics and hard particles coated with a material selected from the group consisting of polymers, waxes, plastics and mixtures thereof.

5. Method as in Claim 1 wherein the disposable mold is removed prior to the removal of the original liquid carrier.

6. Method as in Claim 1 wherein the removal of the original liquid carrier is performed prior to the removal of the disposable mold.

7. Method as in Claim 1 wherein the original carrier is removed by a process selected from the group consisting of sublimation, vacuum dewatering and combinations thereof.

8. Method as in Claim 1 wherein the ceramic article is treated by sintering improve its mechanical properties.

9. Method for producing a ceramic mold for casting metallic parts, having desired exterior shapes, comprising the steps of:
   a. using a rapid prototyping process to produce a disposable pattern whose external shape corresponds to the desired external shape of the metallic part and placing the temporary pattern in a container,
   b. filling the container with a ceramic slurry,
   c. cooling the slurry filled container to solidify said slurry,
   d. removing said disposable pattern from said solidified slurry, and
   e. removing substantially all of the original liquid carrier from said solidified slurry.

10. Method as in Claim 9 wherein said slurry is aqueous based.

11. Method as in Claim 9 wherein said slurry consists essentially of (by wt.):
   a. from about 70% to about 90% ceramic particles,
   b. an amount of at least one cryoprotectant material sufficient to suppress the formation of large crystals during solidification,
   c. from about 10% to about 30% of a liquid suspension of at least one colloidal ceramic material,
   d. up to about 5% of other additives, and
   e. balance water.

12. Method as in Claim 9 wherein the disposable pattern is made of a material selected from the group consisting of polymers, waxes, plastics and hard particles coated with a material selected from the group consisting of polymers, waxes, plastics and mixtures thereof.

13. Method as in Claim 9 wherein the disposable pattern is removed prior to the removal of the original liquid carrier.

14. Method as in Claim 9 wherein the removal of the original liquid carrier is performed prior to the removal of the disposable pattern.

15. Method as in Claim 9 wherein the original liquid carrier is removed by a process selected from the group consisting of sublimation, vacuum dewatering and combinations thereof.

16. Method as in Claim 9 wherein the ceramic article is sintered.

17. Method for producing an integral ceramic core mold for casting metallic parts having an external shape and having at least one internal passage having an internal shape, including the steps of:

a. using a rapid prototyping process to produce a disposable pattern whose external shape corresponds to the desired external configuration of the metallic part and an internal passage shape corresponds to the shape of the desired metallic part internal passage,
b. placing said disposable model in a container,
c. filling said container and said internal cavity with a ceramic slurry,
d. cooling the slurry filled container and cavity to solidify said slurry;
e. removing said disposable model from said solidified slurry, and
f. removing substantially all original liquid carrier from said solidified slurry.

18. Method as in Claim 17 wherein said slurry is aqueous based.

19. Method as in Claim 17 wherein said slurry consists essentially of (by wt.):

a. from about 70% to about 90% ceramic particles,

b. an amount of at least one cryoprotectant material sufficient to suppress the formation of large crystals during solidification,

c. from about 10% to about 30% of a liquid suspension of at least one colloidal ceramic material,

d. up to about 5% of other additives

e. balance essentially water.

20. Method as in Claim 20 wherein the disposable pattern is made of a material selected from the group consisting of polymers, waxes, plastics and hard particles coated with a material selected from the group consisting of polymers, waxes, plastics and mixtures thereof.

21. Method as in Claim 17 wherein the disposable pattern is removed prior to the removal of the original liquid carrier.

22. Method as in Claim 17 wherein the removal of the original liquid carrier is performed prior to the removal of the disposable pattern.

23. Method as in Claim 17 wherein the removal of the original liquid carrier is performed at a temperature below the solidification point of the ceramic slurry.

24. Method as in Claim 17 wherein the ceramic article is by sintered improve its mechanical properties.

25. A method as in claim 17 in which said pattern includes a plurality of channels which extend through the model and connect the external surface of the model with the internal surface of the model.

26. Method as in claim 17 in which at least one of said channels has a complex geometry.

27. A ceramic assembly that includes at least two ceramic articles connected to each other by at least 10 integral ceramic ligands, wherein at least one ligand has a complex geometry.

28. A ceramic assembly as in claim 27 wherein one of the ceramic articles is located at least partially within a cavity within another ceramic article.